

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/524,237  
Source: PCR  
Date Processed by STIC: 1/31/06

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 01/31/2006

PATENT APPLICATION: US/10/524,237

TIME: 15:52:07

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\01312006\J524237.raw

3 <110> APPLICANT: KOPCHICK, John J.  
 4 COSCHIGANO, Karen T.  
 5 WETZEL, Amy N.  
 7 <120> TITLE OF INVENTION: DIAGNOSIS OF KIDNEY DAMAGE AND PROTECTION AGAINST SAME  
 9 <130> FILE REFERENCE: KOPCHICK5A  
 11 <140> CURRENT APPLICATION NUMBER: 10/524,237  
 12 <141> CURRENT FILING DATE: 2005-02-10  
 14 <150> PRIOR APPLICATION NUMBER: US 60/400,052  
 15 <151> PRIOR FILING DATE: 2002-08-02  
 17 <150> PRIOR APPLICATION NUMBER: PCT/US/2003/024053  
 18 <151> PRIOR FILING DATE: 2003-08-04  
 20 <160> NUMBER OF SEQ ID NOS: 34  
 22 <170> SOFTWARE: PatentIn version 3.3  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 747  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Mus musculus  
 30 <220> FEATURE:  
 31 <221> NAME/KEY: misc\_feature  
 32 <222> LOCATION: (14)..(14) ✓  
 33 <223> OTHER INFORMATION: Unknown  
 35 <220> FEATURE:  
 36 <221> NAME/KEY: misc\_feature  
 37 <222> LOCATION: (17)..(17) ✓  
 38 <223> OTHER INFORMATION: Unknown  
 40 <220> FEATURE:  
 41 <221> NAME/KEY: misc\_feature  
 42 <222> LOCATION: (159)..(162) ✓  
 43 <223> OTHER INFORMATION: Unknown  
 45 <220> FEATURE:  
 46 <221> NAME/KEY: misc\_feature  
 47 <222> LOCATION: (198)..(198) ✓  
 48 <223> OTHER INFORMATION: Unknown  
 50 <220> FEATURE:  
 51 <221> NAME/KEY: misc\_feature  
 52 <222> LOCATION: (377)..(377) ✓  
 53 <223> OTHER INFORMATION: Unknown  
 55 <220> FEATURE:  
 56 <221> NAME/KEY: misc\_feature  
 57 <222> LOCATION: (483)..(483) ✓  
 58 <223> OTHER INFORMATION: Unknown  
 60 <220> FEATURE:  
 61 <221> NAME/KEY: misc\_feature

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62 <222> LOCATION: (494)..(494) ✓  
63 <223> OTHER INFORMATION: Unknown  
65 <220> FEATURE:  
66 <221> NAME/KEY: misc\_feature  
67 <222> LOCATION: (526)..(526) ✓  
68 <223> OTHER INFORMATION: Unknown  
70 <220> FEATURE:  
71 <221> NAME/KEY: misc\_feature ✓  
72 <222> LOCATION: (536)..(536) ✓  
73 <223> OTHER INFORMATION: Unknown  
75 <220> FEATURE:  
76 <221> NAME/KEY: misc\_feature ✓  
77 <222> LOCATION: (570)..(570) ✓  
78 <223> OTHER INFORMATION: Unknown  
80 <220> FEATURE:  
81 <221> NAME/KEY: misc\_feature ✓  
82 <222> LOCATION: (575)..(575) ✓  
83 <223> OTHER INFORMATION: Unknown  
85 <220> FEATURE:  
86 <221> NAME/KEY: misc\_feature ✓  
87 <222> LOCATION: (579)..(579) ✓  
88 <223> OTHER INFORMATION: Unknown  
90 <220> FEATURE:  
91 <221> NAME/KEY: misc\_feature ✓  
92 <222> LOCATION: (587)..(587) ✓  
93 <223> OTHER INFORMATION: Unknown  
95 <220> FEATURE:  
96 <221> NAME/KEY: misc\_feature ✓  
97 <222> LOCATION: (595)..(595) ✓  
98 <223> OTHER INFORMATION: Unknown  
100 <220> FEATURE:  
101 <221> NAME/KEY: misc\_feature ✓  
102 <222> LOCATION: (623)..(624) ✓  
103 <223> OTHER INFORMATION: Unknown  
105 <220> FEATURE:  
106 <221> NAME/KEY: misc\_feature ✓  
107 <222> LOCATION: (628)..(629) ✓  
108 <223> OTHER INFORMATION: Unknown  
110 <220> FEATURE:  
111 <221> NAME/KEY: misc\_feature ✓  
112 <222> LOCATION: (641)..(643) ✓  
113 <223> OTHER INFORMATION: Unknown  
115 <220> FEATURE:  
116 <221> NAME/KEY: misc\_feature ✓  
117 <222> LOCATION: (650)..(650) ✓  
118 <223> OTHER INFORMATION: Unknown  
120 <220> FEATURE:  
121 <221> NAME/KEY: misc\_feature ✓  
122 <222> LOCATION: (664)..(664) ✓

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Input Set : A:\sequence listing.txt

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123 <223> OTHER INFORMATION: Unknown  
125 <220> FEATURE:  
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130 <220> FEATURE:  
131 <221> NAME/KEY: misc\_feature  
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133 <223> OTHER INFORMATION: Unknown  
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136 <221> NAME/KEY: misc\_feature  
137 <222> LOCATION: (679)..(680) ✓  
138 <223> OTHER INFORMATION: Unknown  
140 <220> FEATURE:  
141 <221> NAME/KEY: misc\_feature  
142 <222> LOCATION: (688)..(688) ✓  
143 <223> OTHER INFORMATION: Unknown  
145 <220> FEATURE:  
146 <221> NAME/KEY: misc\_feature  
147 <222> LOCATION: (690)..(692) ✓  
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151 <221> NAME/KEY: misc\_feature  
152 <222> LOCATION: (694)..(694) ✓  
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155 <220> FEATURE:  
156 <221> NAME/KEY: misc\_feature  
157 <222> LOCATION: (696)..(696) ✓  
158 <223> OTHER INFORMATION: Unknown  
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161 <221> NAME/KEY: misc\_feature  
162 <222> LOCATION: (700)..(701) ✓  
163 <223> OTHER INFORMATION: Unknown  
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166 <221> NAME/KEY: misc\_feature  
167 <222> LOCATION: (717)..(717) ✓  
168 <223> OTHER INFORMATION: Unknown  
170 <220> FEATURE:  
171 <221> NAME/KEY: misc\_feature  
172 <222> LOCATION: (722)..(725) ✓  
173 <223> OTHER INFORMATION: Unknown  
175 <220> FEATURE:  
176 <221> NAME/KEY: misc\_feature  
177 <222> LOCATION: (729)..(730) ✓  
178 <223> OTHER INFORMATION: Unknown  
180 <220> FEATURE:  
181 <221> NAME/KEY: misc\_feature  
182 <222> LOCATION: (734)..(734) ✓  
183 <223> OTHER INFORMATION: Unknown

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DATE: 01/31/2006

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Input Set : A:\sequence listing.txt

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185 <220> FEATURE:  
 186 <221> NAME/KEY: misc\_feature ✓  
 187 <222> LOCATION: (737)..(737)  
 188 <223> OTHER INFORMATION: Unknown  
 190 <220> FEATURE:  
 191 <221> NAME/KEY: misc\_feature ✓  
 192 <222> LOCATION: (739)..(739)  
 193 <223> OTHER INFORMATION: Unknown  
 195 <220> FEATURE:  
 196 <221> NAME/KEY: misc\_feature ✓  
 197 <222> LOCATION: (741)..(743)  
 198 <223> OTHER INFORMATION: Unknown  
 200 <220> FEATURE:  
 201 <221> NAME/KEY: misc\_feature ✓  
 202 <222> LOCATION: (746)..(746)  
 203 <223> OTHER INFORMATION: Unknown  
 205 <400> SEQUENCE: 1

W--> 206 actcagctcc tacnggntgc ttgtgtggaa gccaacgtgc caacattcat ctacagcagc 60  
 208 tcagtgccttg tggctggacc aaattcctac aaggagatca tcctgaatgg ccatgaggag 120  
 210 gagcatcatg aaagcacatg gtctaaccga taccatggn nngtgaaaga tggctgagaa 180  
 212 ggcatgctg gcaaccntg ggagcatcct gaaaaatggt ggcactttgc atacttgtgc 240  
 214 cttaagactc tctttcatct atggggaaga atgccaagtc acttcaacca ctgtgaaaac 300  
 216 agcactgaag aacaacagca taattaagaa agatgccaca ttctccattg ccaaccctag 360  
 218 gtatgtgggc aatgcancct gggctcacat tctggctgcc aggagcctac aggaccctaa 420  
 220 aaagtcccca agcatccaag gacagtctta ttacattaac agatgacacc cctcaccaaa 480  
 222 gcnatgatga cttnaaaatg caccctgagc aaggagtggg ggcccncccc cttganacca 540  
 224 actgggaagt ctttcctctg cccctgctn tactnggcnt tgccctnccct ccccnngaaa 600  
 226 actggggaac cttcctgcta ccnccannnc taccaactta nnaaaccn ttttaaacc 660  
 228 cccnttgac cncannngn aaaaaaangn nntncnccn ntcctacaa aaaggcncaa 720  
 230 cnnnaacnn ggcnttnanc nnttng 747

233 <210> SEQ ID NO: 2  
 234 <211> LENGTH: 799  
 235 <212> TYPE: DNA  
 236 <213> ORGANISM: Mus musculus  
 239 <220> FEATURE:  
 240 <221> NAME/KEY: misc\_feature ✓  
 241 <222> LOCATION: (1)..(1)  
 242 <223> OTHER INFORMATION: Unknown  
 244 <220> FEATURE:  
 245 <221> NAME/KEY: misc\_feature ✓  
 246 <222> LOCATION: (8)..(8)  
 247 <223> OTHER INFORMATION: Unknown  
 249 <220> FEATURE:  
 250 <221> NAME/KEY: misc\_feature ✓  
 251 <222> LOCATION: (15)..(16)  
 252 <223> OTHER INFORMATION: Unknown  
 254 <220> FEATURE:  
 255 <221> NAME/KEY: misc\_feature ✓  
 256 <222> LOCATION: (18)..(18)

## RAW SEQUENCE LISTING

DATE: 01/31/2006

PATENT APPLICATION: US/10/524,237

TIME: 15:52:07

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\01312006\J524237.raw

257 <223> OTHER INFORMATION: Unknown  
259 <220> FEATURE:  
260 <221> NAME/KEY: misc\_feature  
261 <222> LOCATION: (20)..(21) ✓  
262 <223> OTHER INFORMATION: Unknown  
264 <220> FEATURE:  
265 <221> NAME/KEY: misc\_feature  
266 <222> LOCATION: (30)..(31) ✓  
267 <223> OTHER INFORMATION: Unknown  
269 <220> FEATURE:  
270 <221> NAME/KEY: misc\_feature  
271 <222> LOCATION: (37)..(38) ✓  
272 <223> OTHER INFORMATION: Unknown  
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275 <221> NAME/KEY: misc\_feature  
276 <222> LOCATION: (44)..(44) ✓  
277 <223> OTHER INFORMATION: Unknown  
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280 <221> NAME/KEY: misc\_feature ✓  
281 <222> LOCATION: (53)..(53) ✓  
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284 <220> FEATURE:  
285 <221> NAME/KEY: misc\_feature  
286 <222> LOCATION: (55)..(55) ✓  
287 <223> OTHER INFORMATION: Unknown  
289 <220> FEATURE:  
290 <221> NAME/KEY: misc\_feature  
291 <222> LOCATION: (57)..(58) ✓  
292 <223> OTHER INFORMATION: Unknown  
294 <220> FEATURE:  
295 <221> NAME/KEY: misc\_feature ✓  
296 <222> LOCATION: (77)..(77) ✓  
297 <223> OTHER INFORMATION: Unknown  
299 <220> FEATURE:  
300 <221> NAME/KEY: misc\_feature  
301 <222> LOCATION: (79)..(79) ✓  
302 <223> OTHER INFORMATION: Unknown  
304 <220> FEATURE:  
305 <221> NAME/KEY: misc\_feature  
306 <222> LOCATION: (97)..(97) ✓  
307 <223> OTHER INFORMATION: Unknown  
309 <220> FEATURE:  
310 <221> NAME/KEY: misc\_feature ✓  
311 <222> LOCATION: (104)..(104) ✓  
312 <223> OTHER INFORMATION: Unknown  
314 <220> FEATURE:  
315 <221> NAME/KEY: misc\_feature ✓  
316 <222> LOCATION: (114)..(114) ✓  
317 <223> OTHER INFORMATION: Unknown

**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/10/524,237**

**DATE: 01/31/2006**  
**TIME: 15:52:08**

**Input Set : A:\sequence listing.txt**  
**Output Set: N:\CRF4\01312006\J524237.raw**

**Please Note:**

**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:1; N Pos. 14, 17, 159, 160, 161, 162, 198, 377, 483, 494, 526, 536, 570, 575, 579  
Seq#:1; N Pos. 587, 595, 623, 624, 628, 629, 641, 642, 643, 650, 664, 672, 676, 677, 679  
Seq#:1; N Pos. 680, 688, 690, 691, 692, 694, 696, 700, 701, 717, 722, 723, 724, 725, 729  
Seq#:1; N Pos. 730, 734, 737, 739, 741, 742, 743, 746  
Seq#:2; N Pos. 1, 8, 15, 16, 18, 20, 21, 30, 31, 37, 38, 44, 53, 55, 57, 58, 77, 79, 97, 104  
Seq#:2; N Pos. 114, 126, 127, 134, 140, 147, 148, 151, 153, 156, 160, 168, 173, 179, 184  
Seq#:2; N Pos. 185, 189, 192, 203, 206, 217, 250, 256, 275, 287, 325, 399, 567, 609, 674  
Seq#:2; N Pos. 675, 790  
Seq#:6; N Pos. 579  
Seq#:7; N Pos. 9, 605, 641, 654, 659, 675, 728, 739, 742, 754, 784, 797, 798, 803, 806  
Seq#:7; N Pos. 810, 813, 837, 839, 862, 866, 870, 872, 881  
Seq#:14; N Pos. 94  
Seq#:15; N Pos. 409  
Seq#:16; N Pos. 1, 2, 4, 5, 25, 26  
Seq#:17; N Pos. 145, 246, 263, 290, 295, 313, 331, 333, 341, 344, 349, 354, 367, 369, 377  
Seq#:17; N Pos. 384, 387, 390, 395, 423, 426, 428, 434, 436, 448, 451, 455, 463, 479, 480  
Seq#:17; N Pos. 483, 487, 488, 489, 491, 498, 504, 505, 511, 514, 520, 522, 527, 528, 530  
Seq#:17; N Pos. 537, 540, 541, 544, 546, 547, 552, 558, 566, 567, 568, 569, 575, 578, 579  
Seq#:17; N Pos. 583, 589, 598, 601, 606, 610, 611, 622, 626, 628, 630, 632, 635, 637, 639  
Seq#:17; N Pos. 641, 642, 645, 646, 647, 652, 656, 659, 661, 662, 663, 664, 665, 668, 669  
Seq#:17; N Pos. 673, 674, 681, 682, 686, 690, 695, 698, 700, 704, 706, 707, 715, 716, 717  
Seq#:17; N Pos. 719, 723, 724, 727, 729, 731, 736, 739, 740, 741, 742, 744, 746, 749, 751  
Seq#:17; N Pos. 758, 760, 762, 763, 765, 768, 770, 771, 777, 778, 779, 780, 782, 784, 787  
Seq#:17; N Pos. 788, 789, 793, 794, 798, 799, 800, 801, 805, 815, 816, 820  
Seq#:18; N Pos. 9, 28, 40, 61, 613, 616, 632, 658, 671, 674, 676, 686, 695, 704, 709, 717  
Seq#:18; N Pos. 718, 741, 750, 754, 757, 764, 765, 767, 771, 775, 806, 807, 810, 813, 816  
Seq#:18; N Pos. 831, 833, 836  
Seq#:19; N Pos. 299, 428, 460, 466, 518, 523, 542, 544, 556, 564, 566, 569, 574, 577, 583  
Seq#:19; N Pos. 585, 600, 602  
Seq#:21; N Pos. 409  
Seq#:22; N Pos. 1, 2, 4, 5, 25, 26  
Seq#:23; N Pos. 128, 141, 143, 145, 166, 173, 179, 201, 210, 308, 348, 354, 359, 368, 401  
Seq#:23; N Pos. 402, 408, 441, 447, 461, 472, 488, 495, 496, 509, 522, 523, 524, 526, 543  
Seq#:23; N Pos. 549, 589, 659, 663, 669, 673, 674  
Seq#:24; N Pos. 3, 4, 6, 8, 12, 14, 17, 24, 37, 43, 82, 83, 168, 199, 208, 217, 221, 224, 225  
Seq#:24; N Pos. 226, 228, 232, 247, 249, 263, 277, 279, 283, 286, 290, 291, 293, 294, 296  
Seq#:24; N Pos. 298, 309, 310, 312, 318, 328, 330, 334, 336, 343, 344, 347, 361, 363, 368  
Seq#:24; N Pos. 371, 375, 377, 381, 384, 388, 389, 390, 391, 393, 397, 398, 401, 406, 408  
Seq#:24; N Pos. 411, 415, 418, 420, 429, 434, 436, 442, 448, 451, 455, 456, 457, 464, 467  
Seq#:24; N Pos. 478, 479, 481, 491, 502, 506, 511, 513, 515, 517, 524, 526, 533, 534, 540  
Seq#:24; N Pos. 542, 545, 550, 554, 563, 568, 576, 577, 582, 589, 594, 595, 601, 605, 606  
Seq#:24; N Pos. 608, 615, 616, 621, 622, 626, 627, 629, 641, 643, 644, 645, 657, 659, 660  
Seq#:24; N Pos. 661, 669, 676, 683, 684, 685, 686, 690, 692, 695, 698, 710, 712, 726, 730  
Seq#:24; N Pos. 731, 733, 737, 739, 741, 742, 743, 744, 745, 751, 758, 761, 763, 767, 768

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/524,237

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TIME: 15:52:08

Input Set : A:\sequence listing.txt  
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Seq#:24; N Pos. 769,771,776,778,797,799,803,806,817,828,829,831,838,857,861  
Seq#:24; N Pos. 862,863,865,867,878,880,885,888,889,890,896,897,899,903,912  
Seq#:24; N Pos. 913,914,917,918,920,922,923,924,933,940,949,954,956,958,960  
Seq#:24; N Pos. 964,965,966,971,975  
Seq#:25; N Pos. 5,7  
Seq#:26; N Pos. 2,12,15,21,22,42,145,147,148,149,173,178,180,196,198,206  
Seq#:26; N Pos. 318



## VERIFICATION SUMMARY

DATE: 01/31/2006

PATENT APPLICATION: US/10/524,237

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Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\01312006\J524237.raw

L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
M:341 Repeated in SeqNo=1  
L:455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
M:341 Repeated in SeqNo=2  
L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:540  
L:766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
M:341 Repeated in SeqNo=7  
L:961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:60  
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:360  
L:1031 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:1585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:120  
M:341 Repeated in SeqNo=17  
L:1772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
M:341 Repeated in SeqNo=18  
L:1908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:240  
M:341 Repeated in SeqNo=19  
L:1966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:360  
L:1997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:2181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:120  
M:341 Repeated in SeqNo=23  
L:2984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
M:341 Repeated in SeqNo=24  
L:3036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
L:3116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
M:341 Repeated in SeqNo=26  
L:3801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
M:341 Repeated in SeqNo=27  
L:4148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
M:341 Repeated in SeqNo=30  
L:4455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
M:341 Repeated in SeqNo=32  
L:4701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:540  
M:341 Repeated in SeqNo=33